

OBSERVATIONAL BASIS OF MACH'S PRINCIPLE*

by

L. I. SCHIFF

Stanford University, Stanford, California, USA.

The status of the observational control of the main idea of Mach's principle was reviewed. It was stated, that if Mach's principle is to have any meaning, it gives a method of selection of the inertial coordinate system. This system will be that one on which some average of the motions of the distant masses is uniform. Some opinions concerning the observational errors in specifying this coordinate system with respect to rotation were analysed and it was claimed, that the recently discovered distant galaxies, in conjunction with strong radio sources may provide the most precise connection between the local inertial system and the distant masses of the universe and hence the surest observational basis for Mach's principle.

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